

Executive Order VR-208-A
Emco Phase II EVR System with Hirt Thermal Oxidizer Including INCON ISD

Exhibit 8
Hirt VCS 100 Processor
With Indicator Panel
Operability Test Procedure

Definitions common to all certification and test procedures are in:

D-200 Definitions for Vapor Recovery Procedures

For the purpose of this procedure, the term “ARB” refers to the California Air Resources Board, and the term “ARB Executive Officer” refers to the Executive Officer of the ARB or his or her authorized representative or designate.

1. PURPOSE AND APPLICABILITY

This test procedure verifies the operational status of the Hirt VCS 100 Processor and Indicator Panel.

The station may remain open (normal fuel dispensing) while conducting this procedure.

2. PRINCIPLE AND SUMMARY OF TEST PROCEDURE

The Hirt VCS 100 Processor is designed to activate (e.g. thermally oxidize vapors) when the underground storage tank (UST) ullage pressure exceeds a nominal -0.40 inches water column (“w.c.”). Processor activation will be verified by exposing the processor’s internal vacuum sensor/switch to an atmospheric pressure input. The processor should activate, the Hirt Indicator Panel Processing lamp should light and the Incon VRM Console warning lamp should light. The Incon VRM Console should also post a VRM alarm.

3. BIASES AND INTERFERENCES

- 3.1 This test is only valid when total ullage is 70% or less than capacity of GDF storage tanks.
- 3.2 At least 24 hours must have elapsed after any tests that introduce air and/or nitrogen into the vapor spaces, such as, but not limited to TP-201.3 (including Exhibit 4), TP-201.4 (including Exhibit 6) and Exhibit 5.
- 3.3 There shall be no Phase I bulk product deliveries into or out of the storage tank(s) within the three (3) hours prior to the test or during performance of this test procedure.
- 3.4 Processor should be inactive (i.e. powered but not processing gasoline vapor).

4. EQUIPMENT

- 4.1 Hand tools: 5/16” nut driver or equivalent, 3/8” open end wrench.

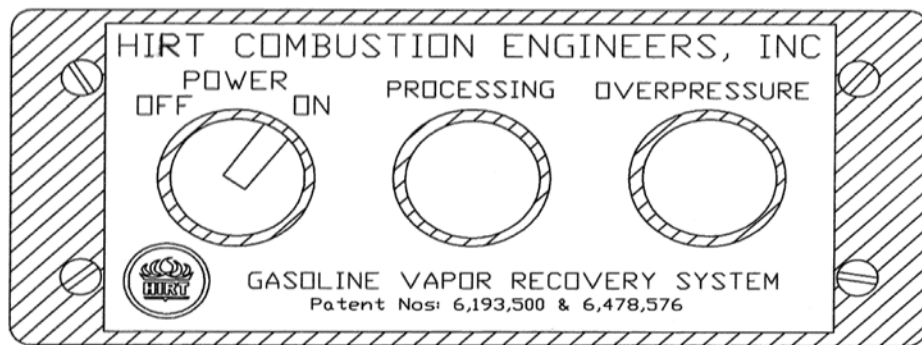
4.2 Stopwatch: Use a stopwatch with an accuracy of ± 0.2 seconds.

4.3 Teflon pipe tape.

5. TEST PROCEDURE

- 5.1 System Status Check: Locate Hirt Indicator Panel and verify that the green lamp on the POWER switch is lit, to be sure power is ON. Record on Form 1. If the Power switch is not lit, the processor does not meet the Exhibit 2 Hirt VCS 100 Thermal Oxidizer specifications and no testing shall be conducted.

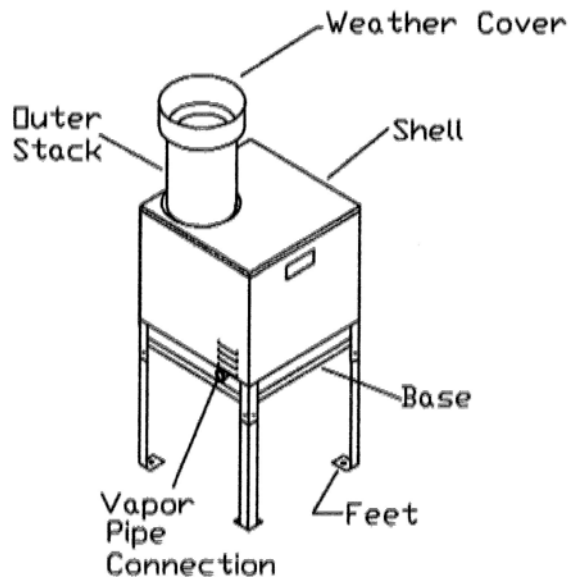
Indicator Panel Face



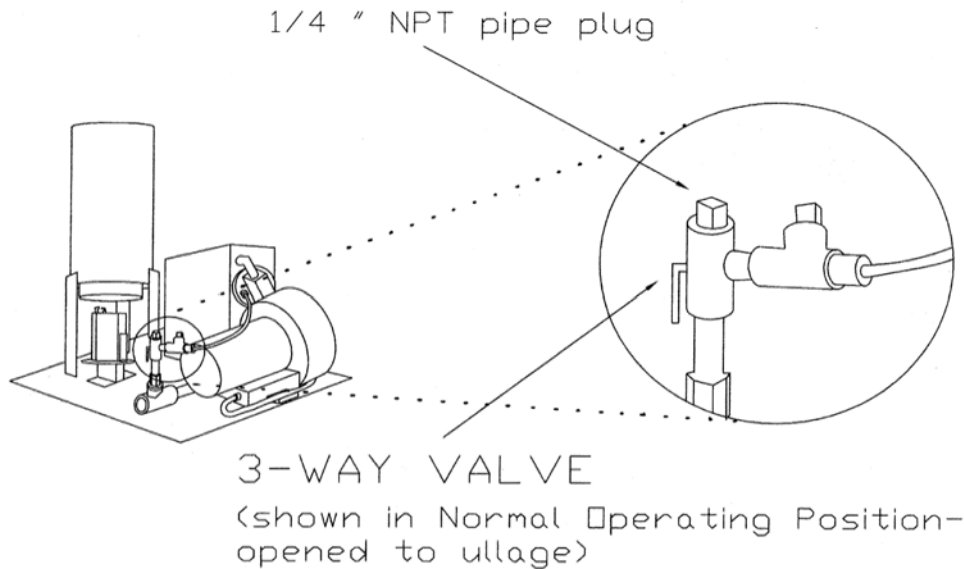
- 5.2 Check green PROCESSING lamp on Indicator Panel. Is the green PROCESSING lamp on? Record on Form 1. If so, then wait until PROCESSING lamp is extinguished before proceeding to step 5.3, to meet BIAS condition 3.4.
- 5.3 Forced Processor Operation: Turn POWER to processor OFF at Indicator Panel.

CAUTION: Processor components, such as Shell, Stack, Burner, and Weather Cover can be Hot! Use care when handling processor or removing its parts.

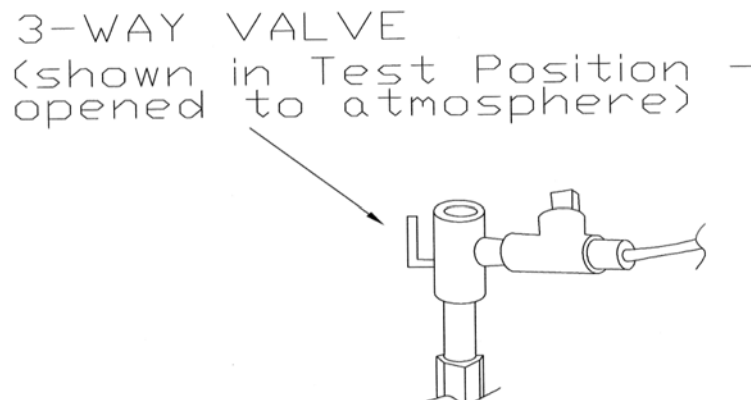
- 5.4. Remove screw from Weather Cover with 5/16" nut driver and remove Weather Cover from Outer Stack.
- 5.5 Remove (4) screws holding Shell to Base with 5/16" nut driver and then remove Shell.



- 5.6 Locate 3-Way Valve on tubing leading to Vacuum Sensor/Switch. The 3-Way Valve handle should be pointing down, in the Normal Operating Position – Opened to UST Ullage. Remove the 1/4" NPT pipe plug from 3-Way Valve with 3/8" wrench.



- 5.7 Turn 3-Way Valve handle to the up position.



- 5.8 Turn POWER to processor ON at Indicator Panel, and verify that green lamp on POWER switch is lit. Start the stopwatch.
- 5.9 Verify green PROCESSING lamp on the Indicator Panel lights within 3 minutes. Record on Form 1. If the Processing lamp is on, processor meets the Exhibit 2 Processor specifications. If the Processing lamp is not on within 3 minutes, the processor does not meet the Exhibit 2 Processor specifications and needs technical service.
- 5.10 Verify the OVERPRESSURE lamp on the Indicator Panel lights within sixty two (62) minutes. Record on Form 1. If the OVERPRESSURE lamp is on, processor meets the Exhibit 2 Processor specifications. If the OVERPRESSURE lamp is not on within sixty two (62) minutes, the processor does not meet the Exhibit 2 Processor specifications and needs technical service.
- 5.11 Verify the Warning lamp on the Incon VRM Console is lit. Press the alarm button and print the alarm posting. Record on Form 1 and attach alarm printout.
- 5.12 Turn POWER to processor OFF at the Hirt Indicator Panel.
- 5.13 Turn 3-Way Valve handle back down to Normal Operating Position. Reinstall 1/4" NPT plug (with Teflon pipe tape) and tighten ¼ turn past snug. Reinstall Shell and Weather Cover.
- 5.14 Turn POWER to processor ON at the Hirt Indicator Panel. Testing is completed.

6. REPORTING

Record all results on Form 1. Districts may require the use of an alternate Form, provided it includes the same minimum parameters as identified in Form 1.

FORM 1: HIRT VCS 100 PROCESSOR OPERABILITY TEST

DATE OF TEST:

SERVICE COMPANY NAME	SERVICE COMPANY'S TELEPHONE
SERVICE TECHNICIAN	HIRT TECHNICIAN CERTIFICATION #(as applicable) CC or DISTRICT TRAINING CERTIFICATION (as applicable)
STATION NAME	DISTRICT PERMIT #
STATION ADDRESS	CITY STATE ZIP
<p>Was TP-201.3 (Including Exhibit 4) conducted in the last 24 hours? Yes ____ No ____</p> <p>Was TP-201.4 (Including Exhibit 6) conducted in the last 24 hours? Yes ____ No ____</p> <p>Was Exhibit 5 conducted in the last 24 hours? Yes ____ No ____</p> <p>Was there a fuel delivery within the last 3 hours? Yes ____ No ____</p> <p>The % ullage of GDF storage tank(s) is _____ gallons.</p>	
STEP 5.1	<p>Is POWER switch lit?</p> <p style="text-align: right;">YES <input type="checkbox"/></p> <p style="text-align: right;">NO <input type="checkbox"/></p>
STEP 5.2	<p>Is PROCESSING lamp ON?</p> <p>If "YES", test cannot be performed until lamp goes off.</p> <p style="text-align: right;">YES <input type="checkbox"/></p> <p style="text-align: right;">NO <input type="checkbox"/></p>
STEP 5.9	<p>Time for PROCESSING Lamp to Light? _____ minutes</p> <p>Did PROCESSING Lamp light within three (3) minutes?</p> <p style="text-align: right;">YES <input type="checkbox"/></p> <p style="text-align: right;">NO <input type="checkbox"/></p>
STEP 5.10	<p>Time for OVERPRESSURE Lamp to Light? _____ minutes</p> <p>Did OVERPRESSURE Lamp light within sixty two (62) minutes?</p> <p style="text-align: right;">YES <input type="checkbox"/></p> <p style="text-align: right;">NO <input type="checkbox"/></p>
STEP 5.11	<p>Did Warning Lamp light on Incon VRM Console?</p> <p>(Attach Active Alarm Printout)</p> <p style="text-align: right;">YES <input type="checkbox"/></p> <p style="text-align: right;">NO <input type="checkbox"/></p>